

**IN THE CLAIMS:**

Claims 1-16 (Cancelled)

17. (New) A unidirectionally elastic bandage, adhesive on one side and used for supporting joints, characterized in that the bandage is embodied as a segment and has an elasticity of the backing layer in the range of 20% to 150%.
18. (New) The unidirectionally elastic adhesive bandage as claimed in claim 1, characterized in that the bandage segment is transversely elastic or longitudinally elastic.
19. (New) The unidirectionally elastic adhesive bandage as claimed in claim 1, characterized in that one or more defined areas of the segment are made elastic.
20. (New) The unidirectionally elastic adhesive bandage as claimed in claim 1, characterized in that the elasticity of the backing layer lies in the range of between 20% and 80%, preferably between 40% and 70%, particularly preferably between 44% and 56%.
21. (New) The unidirectionally elastic adhesive bandage as claimed in claim 1, characterized in that the adhesive is applied across the entire surface of or on a part of the underside of the carrier and/or in the form of patterns.
22. (New) The unidirectionally elastic adhesive bandage as claimed in claim 5, characterized in that the adhesive composed of self-adhesive polymers is chosen from the group of polyacrylates, silicones, polyisobutylenes.
23. (New) The unidirectionally elastic adhesive bandage as claimed in claim 5, characterized in that the adhesive has an adhesion force of 0.1 – 100.0 N, preferably 1.0 – 10.0 N.
24. (New) The unidirectionally elastic adhesive bandage as claimed in claim 1, characterized in that the material of the backing layer is microbiologically nondegradable to an extent of more than 90%, preferably to an extent of more than 99%.

25. (New) The unidirectionally elastic adhesive bandage as claimed in claim 1, characterized in that the backing layer is breathable and allows water vapor to pass through.
26. (New) The unidirectionally elastic adhesive bandage as claimed in claim 1, characterized in that the material of the backing layer is a woven fabric, a film or a combination of both made from viscose, polyester, polyamide, cotton or elastane.
27. (New) The unidirectionally elastic adhesive bandage as claimed in claim 10, characterized in that the material of the backing layer is a polymer material chosen from the group of polyethylene, polypropylene, polyester, in particular polyalkylene terephthalates.
28. (New) The unidirectionally elastic adhesive bandage as claimed in claim 1, characterized in that the porosity of the film is in the range of 10 to 50%.
29. (New) The unidirectionally elastic adhesive bandage as claimed in claim 10, characterized in that the backing layer has a warp number in the range of 300 – 350, preferably 310 - 330, and a weft number in the range of 100 – 140, preferably 120 - 130.
30. (New) The unidirectionally elastic adhesive bandage as claimed in claim 1, characterized in that the shape of the bandage segment is rectangular with a side ratio of length to width of 1.2:1 to 1.8:1, preferably having a size of 10 cm by 8 cm.
31. (New) A method for producing unidirectionally elastic adhesive bandage segments as claimed in claim 1, said method comprising the following steps:
  - coating silicone-treated paper/film with adhesive-containing solution,
  - covering the laminate of releasable paper/film and adhesive layer with the unidirectionally elastic backing layer, and
  - punching the bandage segments out from narrow or wide rolls.
32. (New) Use of unidirectionally elastic adhesive bandage segments as claimed in claim 1 for supporting joints.